137 better resists the periodic grass fires and adds a peculiar feature to the scenery of the mountains (Plate 4b). The growth of grass and trees in the hot, dry plain of the Ruzizi lowland (Plate 3a) is, however, very much like a steppe.

As a result of the expansion of the population and the
● 136 destruction of the forest, free wildlife also has been considerably reduced. In the grassland there remain only very few antelope (Jimela, tuft antelope, gazelles), and of large birds only crowned cranes which because of their great numbers might be called the heraldic animal of Urundi and Ruanda, further bustards, herons, ibises, francolins, Nile geese, etc. In the forests on the riverbanks one still finds bushbucks (Tragelaphus), swamp antelopes, and duikers. In the water itself there are numerous hippopotamuses, crocodiles, and otters. In the remaining parts of forest on the highland periphery and in the tree steppe of the Ruzizi lowland, there still live quite a number of elephants, buffalo, baboons, etc. Everywhere leopards are quite frequent. Especially interesting is the mixture of East African and West African forms in this area which in terms of plant and animal geography is a border region. Just as numerous plants, flora of the West African forest, have penetrated [137] into this region and in part even as far as Lake Victoria, so also have many small and large representatives of West African fauna; I shall mention only the gray parrot, the giant touraco, the hornbill, and, of the mammals, the red buffalo, the chimpanzee, and the gorilla. Because of this mixture of East and West African forms, the plant and animal collections of this bio-geographical border zone which extends through western Urundi and western Ruanda are very interesting.

2. The Population

563 Even more interesting than the mixture of flora and fauna is the population mixture, both in Urundi and in Ruanda. There are three anthropologically and culturally distinct elements which are quite sharply separated but exist side by side or one above the

Since then the Lake Barundi have not changed much as regards their physical and mental constitution, but the individual tribes were struck by a terrible epidemic of sleeping sickness and were reduced to scarcely a third of their original numbers, so that in 1911 I found most of the formerly flourishing settlements deserted and laid waste. Fortunately the stinging [136] fly, Glossina palpalis, which carries the infection, has not penetrated into cool, windy, upper Urundi, and it probably never will since it does not find favorable conditions there.

4. Mental Traits

At this point little will be said about the mental traits of the Barundi since they can be adequately inferred from the detailed descriptions of their life and of their material and intellectual culture which will follow. Therefore, I shall give only a few data about the disposition, temperament, and character of these three large population groups which differ so considerably from each other.

Of the Batwa, the more primitive, freer Forest Batwa are also much freer mentally than those who have settled among the Bahutu and Batussi. Like all hunting tribes, they are characterized by their extraordinarily sharp senses, the superiority of which is very often experienced and still feared by the Bahutu as they advance against the forest in search of arable land. As long as he can still hunt and live, freely roaming the forest, the Mutwa is very proud of his independence and looks with contempt upon the Muhutu wretched and bent low tilling his field, and also on the Village Mutwa living outside the forests who has to earn his living painfully either by working in the fields or as a potter or blacksmith. Toward a European the Mutwa is in most cases, if not hostile, at any rate shy and ostensibly indolent, for even in peaceful intercourse he is afraid of the sorcery and formidable powers of the Whites.

[13] The Village Batwa are in all circumstances shy and cringing as a result of their social position as pariahs, of which

000 swampy valleys. Acrid smoke fills the entire hut. Add to all
362 this several adults, some of whom in many cases may be smoking tobacco, half a dozen children, a few goats, dogs, and chickens, and if during bad weather or at night the only
● [136] opening of the hut is closed and the rats, which are to be found in every hut, [25] begin their sport, it is easy to imagine how refreshing it is for any non-Murundi to stay in such a hut.

252 Cooking (kuteka) in and outside the hut is the business of
[462] the wife, assisted, if necessary, by the children. A man will cook only if he has to, for example, while traveling. The
415 only cooking utensil used is the earthen cooking pot (inkono), made by the Batwa potters (see p. 78) or by women who have mastered the art of pottery (Plate 48). Large earthenware pots (imiwindi) with a capacity of up to 20 liters serve as water containers and for preserving pombe beer. Wooden bowls or pumpkin shells are used as ladles. Milk is kept in carved wooden vessels (iwango), generally of unwieldy shape. As among the
[251] Banjaruanda, they are rinsed with cow urine each time before being filled so as to preserve the milk better. Butter, which is
[234] never eaten but used only for rubbing the body, is produced by
[302] shaking the curdled milk in large bottle gourds, and it is always in a half liquid state. The large earthenware vessels all have a round bottom and stand on the ground of the hut, propped up by stones, while various wooden and gourd vessels (ubwato, akako) stand between the latticework of the walls or are suspended in wide-meshed nets. The wooden milk vessels are placed on a bench-like frame near the fireplace along the wall. There are no spoons, only wooden ladles which are often nicely decorated
[531] with carved linear designs. The boiling mush is stirred with a broad wooden spatula ("matchstick") (No. 1 of Plate 46), and when the meal is ready, it is heaped on shallow wooden or
264 woven bowls. In the customary fashion of Negroes it is then formed into little lumps with one's fingers, dipped into one of the boiled herb sauces, and pushed into the mouth.

252 In front of every house there is a wooden mortar (isekuro),
243 shaped either like a cylinder or an hourglass. In this the women
[412] separate the grain from the husks and panicles, or in other words "thresh," by means of a wooden pestle which they pound rhythmically in turn.

241 In spite of all this, the Barundi do not grow more crops
433 than they need for their subsistence during the year. The soil
[134] is, for the most part, fertile red earth and, in the valley plains, dark gray alluvial soil or humus, except in the sterile and stony quartzite regions of the east. With or without artificial irrigation, this soil could produce much more if a larger area were cultivated. This is prevented mainly by the absence of trade. [56] Since there are neither markets nor organized trade in the large area of central Urundi -- only the Tanganyika region possesses both -- the Murundi could do nothing with what he produced beyond his own needs. Moreover, the Murundi does not anticipate bad harvests. Like nearly all Negroes, he never
731 worries about the future. Since not even the hardy manioc (which, even in the driest years when everything else withers, still furnishes a good yield) is grown in large quantities, extensive areas are plagued by famine in poor harvest years. This is especially true of the arid quartzite regions of eastern Urundi.
[197] Then the missionary stations (Mugera, Mujaga, and others) and the government try to help by importing grain (sorghum) from Uha and Usámbiro, but they still cannot prevent many people, particularly children, from starving to death.

241 Another important reason that prevents further expansion
423 of agriculture can be found in the way land is owned, in the overruling power of the Batussi who claim, above all, grazing land for their herds of cattle. We shall discuss this problem later (p. 57).

241 Various efforts are made to protect the growing crops
● 136 against pests. Weeds are cleared away; caterpillars, beetles, and snails are picked off; birds are frightened away by scarecrows which, for example, are made of gallows-shaped sorghum stalks tied one upon the other with dry, rattling fruit suspended from them. Large animals, however, like the wild boars and baboons in the mountains of western Urundi, are either kept out by fences or chased away by watchmen who walk around in the daytime and at night take up their positions in small huts perched on high posts. From there the guards from time to time set up a loud shouting or rattle with sticks. In the valleys of western

241 Urundi and Ruanda where water is abundant, crowned cranes,
136 spore geese, and Nile geese are the worst enemies of the crops since they eat the young budding sprouts of beans, sweet potatoes, pumpkins, millet, etc. The Bahutu try to frighten them away by rattles and shouting. Ibises, herons, and golden plovers also abound in the swamp valleys, but they do not attack the green crops and prefer to fish for frogs, worms, and snails in the drainage ditches. In the dry quartzite regions of eastern Urundi there are only a few such swamp valleys, and consequently there are only a few of the noxious birds mentioned above.

251 Harvested produce is partly kept in baskets and sacks in the huts, but most of it is put in the basket-shaped storage huts mentioned above (p.22) which are located near the living huts. Particularly beans, sorghum, and corn are stored in these basket-like huts. However, during the dry period ears of corn are suspended in large bundles from the fig trees surrounding the homestead. The tuberous fruit, namely, sweet potatoes, yams, manioc, and arrowroot, are usually not piled up but are left in the ground until they are needed. This is another reason why the quantity grown is never large, since it would spoil otherwise.

423 I mentioned before that further expansion of agriculture in Urundi is blocked by the peculiar conditions of ownership. The situation here is quite similar to that in Ruanda. None of the agricultural Bahutu owns the land that he cultivates. All the land is the property of the king who vests his high batwale with it, who in turn vest the lower Batussi batwale (see p. 134). The mutwale distributes the individual lots of land to the Bahutu he rules, who hold it in fee. [57] The Bahutu must ask his per-
423 mission whenever they intend to work a plot of land, build a hut,
65/ or clear new ground for fields. They pay him a tribute of natural products which is done only once. In addition, they pay him an
[427] annual "tithe" as a ground rent. If the annual rent is not paid at harvest time, the mutwale may punish this tardiness by evicting the person from the land. The mutwale may also demand extraordinary tributes from the Bahutu without compensating them, for example, presents for the head chief, provisions for the caravan of a European passing through, etc. The gifts or payments made

502 vice versa. These dugouts also hug the shoreline so that it is possible to punt for the entire distance, which is faster than rowing. [74] It takes them five days to cover the distance between these two points which, measured in a straight line, are approximately 180 kilometers apart. At the present time
● [136] they only travel at night since the Glossina palpalis, the dreaded transmitter of sleeping sickness, swarms in many places on the lake during the daytime.

484 The provisions for such trips lasting several days are generally taken along from the point of departure. They usually consist of sweet potatoes which are simply piled on the bottom of the boat and boiled whenever the boats land at a resting place.

481 The lake dwellers learn how to swim (kuoga) when they are still children, but because of the crocodiles they do not go into the water very far. People seldom swim in the interior where the rivers have many crocodiles. The swimming stroke is the same among all East African Negroes: with one arm far outstretched, the swimmer throws himself from one side to the other, striking out with only one arm at each stroke.

2. Trade, Money, Weights and Measures

439 In the whole of Urundi, the only trade worth mentioning is in the Tanganyika district. For political reasons, the government has closed off the entire area of central Urundi to foreign trade and traffic. Only a limited number of traveling merchants are permitted. Thus, trade in this area is limited
438 chiefly to the exchange of local products among the natives. With the exception of salt, this trade is not carried on over long distances but only between neighboring communities.

443 In the Tanganyika district of Urundi markets (akaguriro) are held daily in many places due to the influence of the adjacent Congo State. In central Urundi, however, this useful institution is unknown except in the vicinity of missionary stations and at the new residency, Gitega. During the past years, however, in

164 ikinutsi, amosi, ikivimba) are also very widespread but less dangerous. They can presumably be identified with frambesia and are contracted especially by children. The afflicted persons suffer less from pain than from being immobilized. Since they do not keep the sores clean, the healing process is very slow. These skin sores should not be confused with those caused by syphilis (ikikatschji) which is fortunately still very rare in Urundi and in Ruanda. Sores caused by the sand flea (infunsa) are also rather rare in Urundi, except in the area around Lake Tanganyika which has been very much affected by trade. This affliction is far more common in Ruanda. Still more seldom have I seen persons suffering from leprosy (umuwembe) in Urundi, only two cases near Lake Tanganyika and a few cases near the Mugera missionary station where a small isolation hut has been built for lepers. During my entire trip through Urundi I observed elephantiasis only two or three times, and it is equally rare in Ruanda. [143] According to van der Burgt, phthisis can be found in a few districts, but I doubt whether the disease which he calls ikihaha is identical with our European tuberculosis. The bubonic plague, which is endemic in the area around Lake Victoria, in Uganda, Kavirondo, the Mwanza district, and Kisiba, does not seem to occur in Urundi at all, but it is reported that it occurs quite frequently in Ruanda and is known as masseke sickness.

Many Barundi suffer from intestinal worms, and children in particular often die of them. Acute diarrhea is also frequent, and the dangerous dysentery sometimes develops into an epidemic, for example, in 1908. According to the reports given by the missionaries, gonorrhea and fluor albus have been imported here from the East, but they are not very widespread. Eye diseases are rare, except that small children are afflicted by them, and their eyes are often covered by large numbers of the infectious flies.

164 136 As in Ruanda, malaria (injonko, indurwe) occurs everywhere in the warm, swampy lowlands which abound in these countries. I have caught the anopheles mosquito in the swampy mountain valleys of southern Ruanda and northwestern Urundi at

164 altitudes as high as 1,600 to 1,700 meters, once even at
[136] 2,140 meters east of Usumbura. There I saw natives suffering from malaria, and I treated them with quinine. Some of the members of my caravan were also infected. However, it appears that blackwater fever occurs not at all or only very rarely. The highland Barundi are particularly afraid of being infected with malaria in the lowlands of the Akanjaru and the Ruvuvu in the north, in the swampy lakes in the northeast, and in the low, warm coastal area of Lake Tanganyika with the adjoining valley of the Ruzizi River, but the relatively few Barundi who live there permanently appear to be immune for the most part.

The highland Barundi are extremely sensitive to changes
164 in climate when traveling or when changing their residence.
147 In former times when the neighboring areas, for example, Ussumbwa, were still importing female slaves from Urundi, they calculated that eight out of ten slaves would perish because they could not live in the climate (No. 14, 1900-1901, p. 178). The missionaries in Mariahilf in Uschirombo report that in their missionary orphanage they always have quite a number of children from Urundi and Ruanda who are unable to get used to the climate of Uschirombo (which is not particularly bad) and who are almost always sick. The women who go there from Urundi and Ruanda have the same difficulty. Quite a few of them die or lose so much weight that they look like skeletons. Many of them recover after about a year, but they remain weak (No. 14, 1900-1901, p. 288). I would like to add that, ac-
[146] cording to my own observations, it is not merely the change of climate which is responsible for these cases of sickness but also the change in food, for example, lack of milk and poor water. In any case, it has been confirmed by experience that in the whole of East Africa the inhabitants of the cool mountainous areas and the highlands, such as Ruanda, Urundi, Uhehe, Usambara, etc., cannot live for any length of time in the lower, warmer regions, as, for example, in Unjamwesi, Ugogo, Useguha, and the coastal areas. This should be a serious warning to us not to import great numbers of people for work in the plantations of the lowlands, or, as the slogan goes, to open the gates of

164 these large "human reservoirs" of the highlands in order to
147 supply the plantations suffering from a chronic lack of labor. An attempt to do so would lead to results which would differ little from mass murder.

[144] The spread of sleeping sickness from the eastern
164 Congo to the western, lower regions of Urundi has had terrible
●136 results. The carrier of the sleeping sickness, the stinging fly
731 Glossina palpalis, has infected the Ruzizi valley up to the vicinity of Lake Kivu, which is still safe, and the entire basin of Lake Tanganyika almost to the border formed by the surrounding mountains, and it also has spread to the stream and river valleys facing the lake as far as the eastern highland, for example, the valley of the Malagarasi. According to official reports on the development of our protectorate in 1912-13, the situation on Lake Tanganyika is such that, as a result of the considerable expansion of the infected area, the inaccessibility of the population, and also the difficulty of controlling the traffic with the infected areas of the Congo colony, the fight against sleeping sickness will continue for a long time to come. According to official sources, 3,303 new cases were observed in 1913, as compared with 3,560 cases in 1912. In the area of Lake Tanganyika there are probably a total of 200,000 persons suffering from sleeping sickness.

164 In 1911 I traveled through the infected areas of the lower
731 Ruzizi valley and in northeastern Tanganyika. I was horrified by the devastation that the disease had caused among the population which formerly had been so dense and had been so cheerful. Entire villages have ceased to exist, and the population of extensive areas have moved away or have been relocated by the government. The sick who have been collected in well-guarded camps by the government are slowly dying, and none of the remedies applied (Atoxyl, Salvarsan, and others) seem to have any beneficial effect. All economic activity has ceased, traffic and commerce have stopped, and the European firms which were active there have either gone bankrupt or moved away except for a few. After the railroad has been built to Lake Tanganyika, it will be possible to combat the spreading of the sleeping sickness

164 in the Tanganyika region with much better means and prospects
791 for success, but it will take decades before the damage is repaired to any extent.

164 Fortunately the disease has not yet spread to the large
area of Urundi proper east of Lake Tanganyika, and it probably
● 136 will not spread there in the future since the highlands of Urundi, Ruanda, and Uha are too cool for the Glossina palpalis to thrive and also because the conditions necessary for the existence of the fly, flowing water and shady bushes near the water, exist only in certain places of the highlands which are predominantly covered with grass. On the other hand, it seems to me that the great danger still approaching is that after the completion of the Tanganyika railroad the disease may also spread to the central areas of East Africa. Disease-carrying specimens of the Glossina palpalis, which at present is unable to fly across the dry steppes east of Lake Tanganyika, might be disseminated passively by being carried in railroad trains, as has happened in other countries with so many other epidemic or endemic diseases that were spread by means of railroads and ships. Then, if these infected flies find favorable conditions of existence at the eastern end of the railroad line, new nidi for sleeping sickness will be created. The situation may become even more dangerous if Glossina morsitans, the tsetse fly which is very common in the eastern regions, contracts the infection from Glossina palpalis and carries it farther. It has already been definitely proved in the southern part of our colony that Glossina morsitans may become a carrier of true sleeping sickness. If now, by [145] means of the railroad, the immensely large area where Glossina morsitans is common were infected from the direction of Lake Tanganyika, the consequences for the population of German East Africa would be incalculable. It is advisable to face up in time to this danger which is threatening us from western Urundi and the region of Lake Tanganyika. Otherwise reality might prove too much of a shock for us someday.

133 These two torrents have their source in the southwestern part of Ruanda. Their headwaters flow impetuously on a bed littered with rocks and pebbles.

Among the many subsidiaries of the Nyabarongo, let us mention in alphabetic order: the Base, Mukungwa (which comes out of Lake Ruhondo), Nyabugogo, which serves as an outlet for Lake Mohazi, etc.

The Akanyaru, whose basin is less extensive, also originates in the southwest and combines its waters with those of the Nyabarongo at the level of theBugessera. /28/

After they join, these two rivers change their name to Kagera (1). Under this new name they enter the Victoria into which they

[103]

1. Kagera. This word comes from the verb kugera, "to deepen."

The Kagera slowly wanders through the plain, and its lazy waters overflow into large ponds and marshes infested with crocodiles and mosquitoes.

● [136]

pour their yellow waters loaded with silt.

Lake Kivu receives only a small part of the waters of Ruanda. Its outlet is the Ruzizi River, which flows into /Lake/ Tanganyika after a tumultuous course of about 120 kilometers.

131 Ruanda, whose surface may be estimated at 30, 000 to 35, 000
161 square kilometers boasts a population that is believed to reach two million souls.

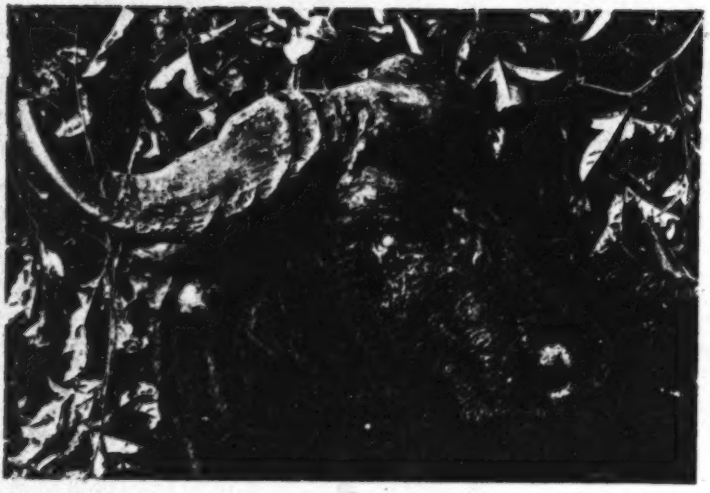
It is made up of three quite distinct ethnic groups: the Batutsi,
563 or Hamites, the Bahutu of the Bantu group, and the Batwa, or Negrillos (Pygmies).

The Batutsi, who are thought to be of Egyptian or Abyssinian
141 origin, (2) are tall in stature. Some measure as much as 2 or even

000

2. From an ethnological point of view the physical appearance of the Ethiopian people is an exception in

Buffalo.



136
[231]

Horned chameleons. They are found in the region of the Bugoyi.

On the plain of the Mulèra in the middle of a field of sorghum. After an elephant hunt.

136
224
516

Longhorn cows.

231

9:Maquet E-5 (1949-1951) 1961 FO42 Rundi FO42

later on—adds still further to its interest. There was a very elaborate series of prescriptions and taboos concerning the care of cattle, and a very full terminology which took into account the differences in colour of skin, in shape and length of horns, and in origin of possession or ownership, &c.[21] According to experts, Ruanda empirical knowledge of cattle-rearing was quite good.

In this field there was a very strict division of labour by sex. Cattle could be cared for only by men. This restriction was based on magical beliefs regarding impurity, as females before puberty and after menopause were permitted to take care of the livestock. The strictest prohibitions were on women in their menstruating periods. *Hutu* were not excluded from cattle rearing, and in fact most of the menial tasks were performed by Hutu servants or clients.

The Tutsi were not nomadic pastoralists. Cattle moved according to the seasons from valleys to hills, but usually in the same area. It might happen, however, that when the drought was particularly severe herds had to be led to another area which might be some distance away. But this did not imply any change of residence for the owners of the cattle which were accompanied only by shepherds.

When in October grass began to grow again, the cows were lean and starving. As they recovered strength on new grass, their milk came back. In November rains were sufficient to allow grazing on the hills. Flies were myriad in December. Then the short dry season began. In January, however, there was still too much water in the valleys for cattle to pasture there, and they stayed in kraals, near huts. In February and March they went out again on to the hills. With the rains flies came again. Milk output increased. In April pastures reserved for the dry season were closed. At the beginning of the dry season (end of May, beginning of June) milk diminished as the grass dried up, and grazing was confined to the valleys. July was not a bad month because cows could pasture on the harvested fields. Flies disappeared in the dry season. August and September were the two worst months for cattle.[22]

Sheep and goats were also kept for their skin and their milk. The Hutu ate goat-flesh but mutton was ritually forbidden. Even today it arouses a very marked repugnance and only the shameless Twa will eat it.

[21] Cf. Vanhove, 1941, pp. 48–59. [22] Schumacher, 1942.

9:Maquet E-5 (1949-1951) 1961 FO42 Rundi FO42

of their different nature which entitled them to rule and as a guarantee against social mobility: because a Hutu was usually not endowed with the Tutsi physical characteristics he could not easily pass the line.

Two other important elements related to the political power system of Ruanda were its extent and its orographic configuration. The country was not very large, about 100 miles from north to south and 140 from west to east. But its relief was that of a maze of hills, many of them very steep, separated by deep valleys. Moreover, it was traversed, from north to south, by a chain of mountains which separate the Congo and Nile basins and is covered with very dense forests inhabited by elephants, leopards, and buffalo.

A centralised government requires good communications. The king must remain, as much as possible, in constant contact with all the regions of his country; tribute must reach the capital regularly, armies must arrive rapidly in any place threatened by an external enemy; local authorities must not be left isolated lest they become too independent. The small extent of Ruanda was indeed an asset from this point of view but this was largely neutralized by the relief which made communications extremely difficult. Notwithstanding these unfavourable physical factors, the mwami had been able to establish and maintain his political network connecting all the subordinate authorities of Ruanda to himself.

These five elements are among those which more significantly affected the domination system of the Tutsi. They are the only ones. Three of them refer to the social power of the Tutsi caste (type of material culture, Tutsi-Hutu ratio, physical appearance), while two others (economy with a small surplus, area, and relief) were operative rather in the sphere of political power. Only two of these background facts (demographic ratio and physical type) were favourable to the domination pattern whereas one (absence of a different material equipment apart from cattle) was neutral and two (lack of a great surplus, geographic configuration) were obstacles.

2. THE SOCIOLOGICAL PROBLEM OF DOMINATION

Within the limits set by these conditions external to the social system, Tutsi had to adapt their organization in order to keep the dominant position for their caste and its rulers. Their problem